

ATTACHMENT B
SUMMARY OF GROUND WATER MONITORING DATA
(2003 TO 2004)

CHELSEA SANDWICH, LLC
NPDES PERMIT NO. MA0003280

GeoLabs, Inc.
Environmental Laboratories

LABORATORY REPORT

PREPARED FOR:

Tighe & Bond, Inc.
53 Southampton Road
Westfield, MA 01085

Attn: Rich Grisler

PROJECT ID:

W-33494-01
Chelsea Terminal

GEOLABS CERTIFICATION #:

M-MA015

SAMPLE NUMBER:

142618 - 142620

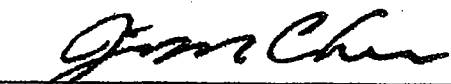
DATE PREPARED:

December 11, 2003

PREPARED BY:

Christine Johnson


APPROVED BY:



Jim Chen, Laboratory Director/Date

GeoLabs, Inc.
Environmental Laboratories

MADEP MCP Response Action Analytical Report Certification Form

| | | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|---|---------------------------|---------------|-----------------|---------------|-----------------|---|--------------|------------|-------------|---------------------------|--|--|-------------|--------------|------------|----------------------------|--|--|--|
| Laboratory Name: <u>GeoLabs, Inc.</u> | Project #: <u>W-33494-01</u> | | | | | | | | | | | | | | | | | | | | | |
| Project Location: <u>Chelsea Terminal</u> | MADEP RTN: _____ | | | | | | | | | | | | | | | | | | | | | |
| This form provides certifications for the following data set: <u>142618 - 142620</u> | | | | | | | | | | | | | | | | | | | | | | |
| Sample matrices: Groundwater (<input checked="" type="checkbox"/>) Soil / Sediment () Drinking Water () Other () | | | | | | | | | | | | | | | | | | | | | | |
| MCP SW-846 Methods Used | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 12.5%;">8260B (<input checked="" type="checkbox"/>)</td> <td style="width: 12.5%;">8151A ()</td> <td style="width: 12.5%;">8330 ()</td> <td style="width: 12.5%;">6010B ()</td> <td style="width: 12.5%;">7470/1A ()</td> <td style="width: 12.5%;">Other: ()</td> <td style="width: 12.5%;"><u>TPH8100M</u></td> </tr> <tr> <td>8270C (<input checked="" type="checkbox"/>)</td> <td>8081A ()</td> <td>VPH ()</td> <td>6020 ()</td> <td>9014M² ()</td> <td colspan="2"></td> </tr> <tr> <td>8082 ()</td> <td>8021B ()</td> <td>EPH ()</td> <td>7000 S³ ()</td> <td colspan="3"></td> </tr> </table> | 8260B (<input checked="" type="checkbox"/>) | 8151A () | 8330 () | 6010B () | 7470/1A () | Other: () | <u>TPH8100M</u> | 8270C (<input checked="" type="checkbox"/>) | 8081A () | VPH () | 6020 () | 9014M ² () | | | 8082 () | 8021B () | EPH () | 7000 S ³ () | | | |
| 8260B (<input checked="" type="checkbox"/>) | 8151A () | 8330 () | 6010B () | 7470/1A () | Other: () | <u>TPH8100M</u> | | | | | | | | | | | | | | | | |
| 8270C (<input checked="" type="checkbox"/>) | 8081A () | VPH () | 6020 () | 9014M ² () | | | | | | | | | | | | | | | | | | |
| 8082 () | 8021B () | EPH () | 7000 S ³ () | | | | | | | | | | | | | | | | | | | |
| As specified in MADEP Compendium of Analytical Methods (Check all that apply) | 1- List Release Tracking Number (RTN), if known 2- M - SW-846 Method 9014 or MADEP Physiologically Available Cyanide (PAC) Method 3- S - SW-846 Methods 7000 Series (List individual method and analyte) | | | | | | | | | | | | | | | | | | | | | |
| An affirmative response to questions A, B, and C is required for "Presumptive Certainty" status | | | | | | | | | | | | | | | | | | | | | | |
| A | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the date set?</td> <td style="width: 15%;">Yes (<input checked="" type="checkbox"/>)</td> <td style="width: 15%;">No¹ ()</td> </tr> </table> | Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the date set? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | |
| Were all samples received by the laboratory in a condition consistent with that described on the Chain-of-Custody documentation for the date set? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | | | |
| B | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines?</td> <td style="width: 15%;">Yes (<input checked="" type="checkbox"/>)</td> <td style="width: 15%;">No¹ ()</td> </tr> </table> | Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | |
| Were all QA/QC procedures required for the specified analytical method(s) included in this report followed, including the requirement to note and discuss in a narrative QC data that did not meet appropriate performance standards or guidelines? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | | | |
| C | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP documents CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"?</td> <td style="width: 15%;">Yes (<input checked="" type="checkbox"/>)</td> <td style="width: 15%;">No¹ ()</td> </tr> </table> | Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP documents CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | |
| Does the analytical data included in this report meet all the requirements for "Presumptive Certainty", as described in Section 2.0 of the MADEP documents CAM VII A, "Quality Assurance and Quality Control Guidelines for the Acquisition and Reporting of Analytical Data"? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | | | |
| A response to questions D and E below is required for "Presumptive Certainty" status | | | | | | | | | | | | | | | | | | | | | | |
| D | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Were all QC performance standards and recommendations for the specified methods achieved?</td> <td style="width: 15%;">Yes (<input checked="" type="checkbox"/>)</td> <td style="width: 15%;">No¹ ()</td> </tr> </table> | Were all QC performance standards and recommendations for the specified methods achieved? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | |
| Were all QC performance standards and recommendations for the specified methods achieved? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | | | |
| E | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 70%;">Were results for all analyte-list compounds/elements for the specified method(s) reported?</td> <td style="width: 15%;">Yes (<input checked="" type="checkbox"/>)</td> <td style="width: 15%;">No¹ ()</td> </tr> </table> | Were results for all analyte-list compounds/elements for the specified method(s) reported? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | |
| Were results for all analyte-list compounds/elements for the specified method(s) reported? | Yes (<input checked="" type="checkbox"/>) | No ¹ () | | | | | | | | | | | | | | | | | | | | |
| ¹ All NO answers must be addressed in an attached Environmental Laboratory case narrative. | | | | | | | | | | | | | | | | | | | | | | |
| <p>I, the undersigned, attest under the pains and penalties of perjury that, based upon my personal inquiry of those responsible for obtaining the information, the material contained in this analytical report is, to the best of my knowledge and belief, accurate and complete.</p> | | | | | | | | | | | | | | | | | | | | | | |
| Signature:  | Position: <u>Lab Director</u> | | | | | | | | | | | | | | | | | | | | | |
| Printed Name: <u>Jim Chen</u> | Date: <u>December 11, 2003</u> | | | | | | | | | | | | | | | | | | | | | |

GeoLabs, Inc.
Environmental Laboratories

Case Narrative

Project ID: W-33494-01
Client Name: Tighe & Bond, Inc.

Sample Number: 142618 - 142620
Received: 12/05/03

Physical Condition of Samples

This project was received by the laboratory in satisfactory condition. The sample(s) were received undamaged, in appropriate containers with the correct preservation.

Project Documentation

This project was accompanied by satisfactory Chain of Custody documentation. The sample container label(s) agreed with the Chain of Custody.

Analysis of Sample(s)

No analytical anomalies or non-conformances were noted by the laboratory during the processing of these sample(s).

Environmental Laboratories

CLIENT NAME: TIGHE & BOND
 SAMPLE TYPE: GROUNDWATER
 COLLECTION DATE: 12/05/03
 REC'D BY LAB: 12/05/03
 COLLECTED BY: CLIENT
 PRESERVATIVE: HYDROCHLORIC ACID

PROJECT ID: W-33494-01
 REPORT DATE: 12/11/03
 ANALYZED BY: ZYZ
 ANALYSIS DATE: 12/05&09/03
 DIGESTION DATE: N/A

VOLATILE ORGANICS

| | | |
|-------------------------|----------|----------|
| SAMPLE NUMBER: | 142618 | 142619 |
| SAMPLE LOCATION: | INFLUENT | EFFLUENT |

| | RESULTS (µg/L) | | DETECTION LIMIT (µg/L) |
|-----------------------------|--------------------------|----|----------------------------------|
| Acetone | ND | ND | 50.0 |
| Acrylonitrile | ND | ND | 50.0 |
| Benzene | 5.05 | ND | 5.0 |
| Bromobenzene | ND | ND | 5.0 |
| Bromochloromethane | ND | ND | 2.0 |
| Bromoform | ND | ND | 5.0 |
| Bromomethane | ND | ND | 2.8 |
| 2-Butanone | ND | ND | 10.0 |
| n-Butylbenzene | ND | ND | 5.0 |
| Carbon Tetrachloride | ND | ND | 5.0 |
| Chlorobenzene | ND | ND | 5.0 |
| Chloroethane | ND | ND | 5.0 |
| 2-Chloroethylvinylether | ND | ND | 5.0 |
| Chloroform | ND | ND | 5.0 |
| Chloromethane | ND | ND | 5.0 |
| 2-Chlorotoluene | ND | ND | 5.0 |
| 4-Chlorotoluene | ND | ND | 5.0 |
| Dibromomethane | ND | ND | 5.0 |
| Dibromochloromethane | ND | ND | 5.0 |
| Dichlorobromomethane | ND | ND | 5.0 |
| Dichlorodifluoromethane | ND | ND | 5.0 |
| 1,1-Dichloroethane | ND | ND | 5.0 |
| 1,1-Dichloroethene | ND | ND | 0.96 |
| 1,1-Dichloropropene | ND | ND | 0.4 |
| 1,2-Dibromoethane | ND | ND | 0.63 |
| 1,2-Dibromo-3-chloropropane | ND | ND | 5.0 |
| 1,2-Dichlorobenzene | ND | ND | 5.0 |
| 1,2-Dichloroethane | ND | ND | 5.0 |
| 1,2-Dichloropropane | ND | ND | 5.0 |
| 1,3-Dichlorobenzene | ND | ND | 5.0 |
| 1,3-Dichloropropane | ND | ND | 5.0 |
| 1,4-Dichlorobenzene | ND | ND | 5.0 |
| 2,2-Dichloropropane | ND | ND | 5.0 |
| c-1,2-Dichloroethene | ND | ND | 5.0 |
| c-1,3-Dichloropropene | ND | ND | 0.65 |
| t-1,2-Dichloroethene | ND | ND | 5.0 |
| t-1,3-Dichloropropene | ND | ND | 0.95 |
| Ethylbenzene | ND | ND | 5.0 |
| Hexachlorobutadiene | ND | ND | 0.19 |

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME: **TIGHE & BOND**
SAMPLE TYPE: **GROUNDWATER**
COLLECTION DATE: **12/05/03**
REC'D BY LAB: **12/05/03**
COLLECTED BY: **CLIENT**
PRESERVATIVE: **HYDROCHLORIC ACID**

PROJECT ID: **W-33494-01**
REPORT DATE: **12/11/03**
ANALYZED BY: **ZYZ**
ANALYSIS DATE: **12/05&09/03**
DIGESTION DATE: **N/A**

VOLATILE ORGANICS

| | | |
|-------------------------|-----------------|-----------------|
| SAMPLE NUMBER: | 142618 | 142619 |
| SAMPLE LOCATION: | INFLUENT | EFFLUENT |

| | RESULTS (µg/L) | | DETECTION LIMIT (µg/L) |
|---------------------------|-------------------|----|---------------------------|
| 2-Hexanone | ND | ND | 10.0 |
| Isopropylbenzene | ND | ND | 5.0 |
| p-Isopropyltoluene | ND | ND | 5.0 |
| Methylene Chloride | ND | ND | 10.0 |
| 4-Methyl-2-pentanone | ND | ND | 5.0 |
| Methyl tert-butyl ether | ND | ND | 5.0 |
| Naphthalene | ND | ND | 20.0 |
| n-propylbenzene | ND | ND | 5.0 |
| Sec-butylbenzene | ND | ND | 5.0 |
| Styrene | ND | ND | 5.0 |
| tert-butylbenzene | ND | ND | 5.0 |
| Tetrachloroethene | ND | ND | 5.0 |
| Toluene | ND | ND | 5.0 |
| Trichloroethene | ND | ND | 5.0 |
| Trichlorofluoromethane | ND | ND | 5.0 |
| 1,1,1-Trichloroethane | ND | ND | 5.0 |
| 1,1,2-Trichloroethane | ND | ND | 5.0 |
| 1,1,2,2-Tetrachloroethane | ND | ND | 0.61 |
| 1,1,1,2-Tetrachloroethane | ND | ND | 5.0 |
| 1,2,3-Trichloropropane | ND | ND | 5.0 |
| 1,2,3-Trichlorobenzene | ND | ND | 5.0 |
| 1,2,4-Trichlorobenzene | ND | ND | 5.0 |
| 1,2,4-Trimethylbenzene | 14.3 | ND | 5.0 |
| 1,3,5-Trimethylbenzene | ND | ND | 5.0 |
| Vinyl Chloride | ND | ND | 2.0 |
| Xylenes | ND | ND | 5.0 |

Surrogate Recoveries:

| | | | |
|----------------------|------|------|--|
| dibromofluoromethane | 106% | 96% | |
| 1,2-Dichloroethane | 107% | 115% | |
| toluene-d8 | 102% | 102% | |
| BFB | 87% | 107% | |

ND = NOT DETECTED

Method Reference:

EPA Method 8260B (1) GC/MS

1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1997, 3rd Ed.

Environmental Laboratories

| | | | |
|------------------|-------------------|-----------------|------------|
| CLIENT NAME: | TIGHE & BOND | PROJECT ID: | W-33494-01 |
| SAMPLE TYPE: | GROUNDWATER | REPORT DATE: | 12/11/03 |
| COLLECTION DATE: | 11/26/03 | ANALYZED BY: | ZYZ |
| REC'D BY LAB: | 12/05/03 | ANALYSIS DATE: | 12/06/03 |
| COLLECTED BY: | CLIENT | DIGESTION DATE: | N/A |
| PRESERVATIVE: | HYDROCHLORIC ACID | | |

VOLATILE ORGANICS

| | |
|------------------|------------|
| SAMPLE NUMBER: | 142620 |
| SAMPLE LOCATION: | TRIP BLANK |

| | RESULTS (µg/L) | DETECTION LIMIT (µg/L) |
|-----------------------------|-------------------|---------------------------|
| Acetone | ND | 50.0 |
| Acrylonitrile | ND | 50.0 |
| Benzene | ND | 5.0 |
| Bromobenzene | ND | 5.0 |
| Bromochloromethane | ND | 2.0 |
| Bromoform | ND | 5.0 |
| Bromomethane | ND | 2.8 |
| 2-Butanone | ND | 10.0 |
| n-Butylbenzene | ND | 5.0 |
| Carbon Tetrachloride | ND | 5.0 |
| Chlorobenzene | ND | 5.0 |
| Chloroethane | ND | 5.0 |
| 2-Chloroethylvinylether | ND | 5.0 |
| Chloroform | ND | 5.0 |
| Chloromethane | ND | 5.0 |
| 2-Chlorotoluene | ND | 5.0 |
| 4-Chlorotoluene | ND | 5.0 |
| Dibromomethane | ND | 5.0 |
| Dibromochloromethane | ND | 5.0 |
| Dichlorobromomethane | ND | 5.0 |
| Dichlorodifluoromethane | ND | 5.0 |
| 1,1-Dichloroethane | ND | 5.0 |
| 1,1-Dichloroethene | ND | 0.96 |
| 1,1-Dichloropropene | ND | 0.4 |
| 1,2-Dibromoethane | ND | 0.63 |
| 1,2-Dibromo-3-chloropropane | ND | 5.0 |
| 1,2-Dichlorobenzene | ND | 5.0 |
| 1,2-Dichloroethane | ND | 5.0 |
| 1,2-Dichloropropane | ND | 5.0 |
| 1,3-Dichlorobenzene | ND | 5.0 |
| 1,3-Dichloropropane | ND | 5.0 |
| 1,4-Dichlorobenzene | ND | 5.0 |
| 2,2-Dichloropropane | ND | 5.0 |
| c-1,2-Dichloroethene | ND | 5.0 |
| c-1,3-Dichloropropene | ND | 0.65 |
| t-1,2-Dichloroethene | ND | 5.0 |
| t-1,3-Dichloropropene | ND | 0.95 |
| Ethylbenzene | ND | 5.0 |
| Hexachlorobutadiene | ND | 0.19 |

GeoLabs, Inc.
Environmental Laboratories

CLIENT NAME: **TIGHE & BOND**
SAMPLE TYPE: **GROUNDWATER**
COLLECTION DATE: **11/26/03**
REC'D BY LAB: **12/05/03**
COLLECTED BY: **CLIENT**
PRESERVATIVE: **HYDROCHLORIC ACID**

PROJECT ID: **W-33494-01**
REPORT DATE: **12/11/03**
ANALYZED BY: **ZYZ**
ANALYSIS DATE: **12/06/03**
DIGESTION DATE: **N/A**

VOLATILE ORGANICS

SAMPLE NUMBER: 142620
SAMPLE LOCATION: TRIP BLANK

| | RESULTS (µg/L) | DETECTION LIMIT (µg/L) |
|------------------------------|--------------------------|----------------------------------|
| 2-Hexanone | ND | 10.0 |
| Isopropylbenzene | ND | 5.0 |
| p-Isopropyltoluene | ND | 5.0 |
| Methylene Chloride | ND | 10.0 |
| 4-Methyl-2-pentanone | ND | 5.0 |
| Methyl tert-butyl ether | ND | 5.0 |
| Naphthalene | ND | 20.0 |
| n-propylbenzene | ND | 5.0 |
| Sec-butylbenzene | ND | 5.0 |
| Styrene | ND | 5.0 |
| tert-butylbenzene | ND | 5.0 |
| Tetrachloroethene | ND | 5.0 |
| Toluene | ND | 5.0 |
| Trichloroethene | ND | 5.0 |
| Trichlorofluoromethane | ND | 5.0 |
| 1,1,1-Trichloroethane | ND | 5.0 |
| 1,1,2-Trichloroethane | ND | 5.0 |
| 1,1,2,2-Tetrachloroethane | ND | 0.61 |
| 1,1,1,2-Tetrachloroethane | ND | 5.0 |
| 1,2,3-Trichloropropane | ND | 5.0 |
| 1,2,3-Trichlorobenzene | ND | 5.0 |
| 1,2,4-Trichlorobenzene | ND | 5.0 |
| 1,2,4-Trimethylbenzene | ND | 5.0 |
| 1,3,5-Trimethylbenzene | ND | 5.0 |
| Vinyl Chloride | ND | 2.0 |
| Xylenes | ND | 5.0 |
| Surrogate Recoveries: | | |
| dibromofluoromethane | 101% | |
| 1,2-Dichloroethane | 115% | |
| toluene-d8 | 110% | |
| BFB | 117% | |

ND = NOT DETECTED

Method Reference:

EPA Method 8260B (1) GC/MS

1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1997, 3rd Ed.

USEPA, INC.
Environmental Laboratories

BLANK

ND

12/05/03

VOLATILE ORGANICS LCS

%RECOVERY

| | | | |
|--------------------------|------|-----------------------------|------|
| Dichlorodifluoromethane | 98% | 1,1,2-Trichloroethane | 98% |
| Chloromethane | 97% | Tetrachloroethene | 101% |
| Vinyl chloride | 100% | 1,3-Dichloropropane | 101% |
| Bromomethane | 107% | 2-Hexanone | 90% |
| Chloroethane | 103% | Dibromochloromethane | 88% |
| Trichlorofluoromethane | 97% | EDB | 88% |
| Acrolein | 88% | Chlorobenzene | 98% |
| 1,1-Dichloroethene | 100% | 1,1,1,2-tetrachloroethane | 98% |
| Acetone | 90% | Ethylbenzene | 100% |
| Carbon Disulfide | 98% | m,p-Xylene | 94% |
| Methylene chloride | 101% | o-Xylene | 91% |
| Acrylonitrile | 86% | Styrene | 95% |
| trans-1,2-Dichloroethene | 98% | Bromoform | 81% |
| MTBE | 91% | Isopropylbenzene | 102% |
| 1,1-Dichloroethane | 100% | Bromobenzene | 99% |
| 2-Butanone | 88% | 1,1,2,2-Tetrachloroethane | 93% |
| Carbon tetrachloride | 96% | 1,2,3-Trichloropropane | 93% |
| 2,2-Dichloropropane | 98% | N-propylbenzene | 92% |
| c-1,2-dichloroethene | 105% | 2-Chlorotoluene | 95% |
| Bromochloromethane | 96% | 4-Chlorotoluene | 89% |
| Chloroform | 98% | 1,3,5-Trimethylbenzene | 79% |
| 1,1,1-Trichloroethane | 102% | tert-Butylbenzene | 92% |
| 1,1-dichloropropene | 105% | 1,2,4-Trimethylbenzene | 74% |
| Benzene | 102% | sec-Butylbenzene | 108% |
| 1,2-Dichloroethane | 101% | 1,3-Dichlorobenzene | 101% |
| Trichloroethene | 105% | 1,4-Dichlorobenzene | 103% |
| 1,2-Dichloropropane | 99% | p-Isopropyltoluene | 90% |
| Dibromomethane | 98% | 1,2-Dichlorobenzene | 102% |
| Bromodichloromethane | 97% | N-Butylbenzene | 87% |
| 2-Chloroethylvinyl Ether | 58% | 1,2-dibromo-3-chloropropane | 97% |
| c-1,3-Dichloropropene | 100% | 1,2,4-trichlorobenzene | 81% |
| Toluene | 97% | Hexachlorobutadiene | 97% |
| t-1,3-Dichloropropene | 107% | Naphthalene | 83% |
| | | 1,2,3-Trichlorobenzene | 91% |

MCP Limits 70%-130%

The majority of recoveries must fall within this range.

GeoLabs, Inc.
Environmental Laboratories

| | | | |
|------------------|---------------|-----------------|------------|
| CLIENT NAME: | TIGHE & BOND | PROJECT ID: | W-33494-01 |
| SAMPLE TYPE: | GROUNDWATER | REPORT DATE: | 12/11/03 |
| COLLECTION DATE: | 12/05/03 | ANALYZED BY: | CL |
| REC'D BY LAB: | 12/05/03 | ANALYSIS DATE: | 12/10/03 |
| COLLECTED BY: | CLIENT | DIGESTION DATE: | 12/08/03 |
| PRESERVATIVE: | SULFURIC ACID | | |

TOTAL PETROLEUM HYDROCARBONS

| SAMPLE NUMBER | SAMPLE LOCATION | TPH (mg/L) | DETECTION LIMIT (mg/L) |
|--------------------------|----------------------------|-----------------------|-----------------------------------|
|--------------------------|----------------------------|-----------------------|-----------------------------------|

| | | | |
|--------|----------|------|------|
| 142618 | INFLUENT | 13.2 | 0.20 |
|--------|----------|------|------|

| | | | |
|--------|----------|----|------|
| 142619 | EFFLUENT | ND | 0.20 |
|--------|----------|----|------|

ND = NOT DETECTED

Method Reference:

EPA Method 8100 (1) Modified

1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1986, 3rd Edition.

Environmental Laboratories

CLIENT NAME: TIGHE & BOND
SAMPLE TYPE: GROUNDWATER
COLLECTION DATE: 12/05/03
REC'D BY LAB: 12/05/03
COLLECTED BY: CLIENT

PROJECT ID: W-33494-01
REPORT DATE: 12/11/03
ANALYZED BY: CL

TPH WATER QA/QC

| | BLANK | MDL | LCS % | % REC. |
|---------------------|-------|----------|-------|---------|
| Gasoline | ND | 0.2 mg/L | | |
| Kerosene / Jet Fuel | ND | 0.2 mg/L | | |
| Diesel Fuel #2 | ND | 0.2 mg/L | 77% | 40-140% |
| Fuel #4 | ND | 0.2 mg/L | | |
| Fuel #6 | ND | 0.2 mg/L | | |
| Transformer Oil | ND | 0.2 mg/L | | |
| Paraffin Oil | ND | 0.2 mg/L | | |
| Motor Oil | ND | 0.2 mg/L | | |
| | | | | |
| Surrogate | | | | |
| | | | | |
| OTP % Recovery | 85% | | 83% | 40-140% |

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| | | | |
|------------------|--------------|-----------------|------------|
| CLIENT NAME: | TIGHE & BOND | PROJECT ID: | W-33494-01 |
| SAMPLE TYPE: | GROUNDWATER | REPORT DATE: | 12/11/03 |
| COLLECTION DATE: | 12/05/03 | ANALYZED BY: | RD |
| REC'D BY LAB: | 12/05/03 | ANALYSIS DATE: | 12/10/03 |
| COLLECTED BY: | CLIENT | DIGESTION DATE: | 12/08/03 |
| PRESERVATIVE: | N/A | | |

POLYNUCLEAR AROMATIC HYDROCARBONS

| | | |
|-------------------------|----------|----------|
| SAMPLE NUMBER: | 142618 | 142619 |
| SAMPLE LOCATION: | INFLUENT | EFFLUENT |

| | RESULTS (µg/L) | | DETECTION LIMIT (µg/L) |
|------------------------|--------------------------|----|----------------------------------|
| Naphthalene | ND | ND | 0.750 |
| 2-Methylnaphthalene | 6.22 | ND | 0.750 |
| Acenaphthylene | ND | ND | 0.250 |
| Acenaphthene | 8.88 | ND | 0.500 |
| Fluorene | ND | ND | 0.500 |
| Phenanthrene | ND | ND | 0.500 |
| Anthracene | ND | ND | 0.500 |
| Fluoranthene | 1.63 | ND | 0.500 |
| Pyrene | 1.41 | ND | 1.25 |
| Benz[a]Anthracene | ND | ND | 0.500 |
| Chrysene | ND | ND | 0.500 |
| Benzo[b]Fluoranthene | ND | ND | 0.500 |
| Benzo[k]Fluoranthene | ND | ND | 1.00 |
| Benzo[a]Pyrene | ND | ND | 0.200 |
| Indeno[1,2,3-Cd]Pyrene | ND | ND | 0.500 |
| Dibenzo[a,h]Anthracene | ND | ND | 0.500 |
| Benzo[g,h,i]Perylene | ND | ND | 1.00 |

ND = NOT DETECTED

Method Reference:

EPA Method 8270C (1)

1) U.S. EPA Test Methods for Evaluating Solid Waste, Physical/Chemical Methods, SW-846, 1998 3rd Edition.

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POLYNUCLEAR AROMATIC HYDROCARBONS - QC

BLANK

Naphthalene
 2-Methylnaphthalene
 Acenaphthylene
 Acenaphthene
 Fluorene
 Phenanthrene
 Anthracene
 Fluoranthene
 Pyrene
 Benz[a]Anthracene
 Chrysene
 Benzo[b]Fluoranthene
 Benzo[k]Fluoranthene
 Benzo[a]Pyrene
 Indeno[1,2,3-Cd]Pyrene
 Dibenzo[a,h]Anthracene
 Benzo[g,h,i]Perylene

ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND
 ND

LCSS 1

Limit

Acenaphthene
 Pyrene

84%
 94%

40-140%
 40-140%

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CLIENT NAME: **TIGHE & BOND**
SAMPLE TYPE: **GROUNDWATER**
COLLECTION DATE: **12/05/03**
REC'D BY LAB: **12/05/03**
COLLECTED BY: **CLIENT**
PRESERVATIVE: **N/A**

PROJECT ID: **W-33494-01**
REPORT DATE: **12/11/03**
ANALYZED BY: **RP**
ANALYSIS DATE: **12/05/03**
DIGESTION DATE: **N/A**

TURBIDITY

| SAMPLE NUMBER | SAMPLE LOCATION | TURBIDITY (N.T.U.) | DETECTION LIMIT (N.T.U.) |
|--------------------------|----------------------------|-------------------------------|-------------------------------------|
|--------------------------|----------------------------|-------------------------------|-------------------------------------|

| | | | |
|-----------------|-----------------|-------------|--------------|
| 142618 * | INFLUENT | 90.0 | 0.252 |
|-----------------|-----------------|-------------|--------------|

| | | | |
|---------------|-----------------|--------------|---------------|
| 142619 | EFFLUENT | 0.220 | 0.0504 |
|---------------|-----------------|--------------|---------------|

ND= NOT DETECTED

***5x dilution**

Method Reference:

EPA Method 180.1 (1)

1) U.S. EPA 1983. "Methods for Chemical Analysis of Water and Wastes." EPA-600/4-79-020,
EPA, EMSL, Cincinnati, Ohio 45268.

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| | | | |
|------------------|--------------|-----------------|------------|
| CLIENT NAME: | TIGHE & BOND | PROJECT ID: | W-33494-01 |
| SAMPLE TYPE: | GROUNDWATER | REPORT DATE: | 12/11/03 |
| COLLECTION DATE: | 12/05/03 | ANALYZED BY: | RP |
| REC'D BY LAB: | 12/05/03 | ANALYSIS DATE: | 12/05/03 |
| COLLECTED BY: | CLIENT | DIGESTION DATE: | N/A |
| PRESERVATIVE: | N/A | | |

COLOR

| SAMPLE NUMBER | SAMPLE LOCATION | COLOR (mg PtCo/L) | DETECTION LIMIT (mg PtCo/L) |
|------------------|--------------------|----------------------|--------------------------------|
|------------------|--------------------|----------------------|--------------------------------|

| | | | |
|--------|----------|------|-----|
| 142618 | INFLUENT | 7.00 | 5.0 |
|--------|----------|------|-----|

| | | | |
|--------|----------|------|-----|
| 142619 | EFFLUENT | 31.0 | 5.0 |
|--------|----------|------|-----|

ND = NOT DETECTED

Method Reference:

EPA Method 110.3 (1)

1) U.S. EPA 1983. "Methods for Chemical Analysis of Water and Wastes." EPA-600/4-79-020, EPA, EMSL, Cincinnati, Ohio 45268.

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| | | | |
|------------------|--------------|-----------------|------------|
| CLIENT NAME: | TIGHE & BOND | PROJECT ID: | W-33494-01 |
| SAMPLE TYPE: | GROUNDWATER | REPORT DATE: | 12/11/03 |
| COLLECTION DATE: | 12/05/03 | ANALYZED BY: | AS |
| REC'D BY LAB: | 12/05/03 | ANALYSIS DATE: | 12/10/03 |
| COLLECTED BY: | CLIENT | DIGESTION DATE: | N/A |
| PRESERVATIVE: | N/A | | |

TOTAL SUSPENDED SOLIDS

| SAMPLE NUMBER | SAMPLE LOCATION | TOTAL SUSPENDED SOLIDS (mg/L) | DETECTION LIMIT (mg/L) |
|--------------------------|----------------------------|--|-----------------------------------|
|--------------------------|----------------------------|--|-----------------------------------|

| | | | |
|--------|----------|------|------|
| 142618 | INFLUENT | 8.00 | 4.00 |
|--------|----------|------|------|

| | | | |
|--------|----------|----|------|
| 142619 | EFFLUENT | ND | 4.00 |
|--------|----------|----|------|

LT = LESS THAN

Method Reference:

EPA Method 160.3 (1)

1) U.S. EPA 1983. "Methods for Chemical Analysis of Water and Wastes, EPA-600/4-79-020, EPA, EMSL, Cincinnati, Ohio 45268.

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LIMITATIONS & EXCLUSIONS

All the professional opinions presented in this report are based solely on the scope of work conducted and sources referred to in our report. The data presented by GeoLabs in this report was collected and analyzed using generally accepted industry methods and practices at the time the report was generated. This report represents the conditions, locations and materials that were observed at the time the work was conducted. No inferences regarding other conditions, locations or materials, at a later or earlier time may be made based on the contents of the report. No other warranty, express or implied is made.

This report was prepared for the sole use of our client. Portions of the report may not be used independent of the entire report.

All analyses were performed within required holding times, in accordance with EPA protocols and using accepted QA/QC procedures. All QA/QC meets acceptable limits unless otherwise noted. The information contained in this report is, to the best of my knowledge, accurate and complete.

Any and all subsequent pages of this report are chain(s) of custody.

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